



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,095	01/15/2002	Keita Suzuki	011719	4433

23850 7590 04/09/2004

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

PATTERSON, MARC A

ART UNIT

PAPER NUMBER

1772

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

Advisory Action	Application No. 10/030,095	Applicant(s) SUZUKI, KEITA	
	Examiner Marc A Patterson	Art Unit 1772	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 24 February 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: none.

Claim(s) objected to: none.

Claim(s) rejected: 4-8 and 10-12.

Claim(s) withdrawn from consideration: none.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☒ Other: See attached

DETAILED ACTION

WITHDRAWN REJECTIONS

1. The 35 U.S.C. 112 second paragraph rejection of Claims 4 – 8 and 10 – 12, of record on page 2 of the previous Action, is withdrawn.

Acknowledgement of Applicant's Amendments

2. The amendment made in Claim 1 in the After Final Amendment filed February 27, 2004 has not been entered because the amendment raises a new issue. The claims prior to amendment did not include newly submitted Claims 13 and 15, which are directed to a barrier layer which is 'present in a plurality of gradient layers at a concentration that increases in each sequential gradient layer.' The amendment would therefore require further search and consideration to be completely addressed. If the amendment were to be entered, the amended claim would overcome the current prior art of record.

ANSWERS TO APPLICANT'S ARGUMENTS

3. Applicant's arguments regarding the 35 U.S.C. 112 second paragraph rejection of Claims 4 – 8 and 10 – 12, of record in the previous Action, have been considered and have been found to be persuasive. The rejections are therefore withdrawn.

Applicant's arguments regarding the 35 U.S.C. 103(a) rejection of Claims 4 – 6 and 10 – 12 as being unpatentable over Hunter (U.S. Patent No. 5,891,373) in view of Spohn (U.S. Patent No. 6,127,478), of record in the previous Action, have been carefully considered but have not been found to be persuasive for the reasons set forth below.

Art Unit: 1772

Applicant argues, on page 13 of Paper No. 7, that there is no motivation to combine Hunter and Spohn; Hunter teaches away from any construct not comprising two adhesive layers, Applicant argues, whereas Spohn teaches a blend which is advantageous because a hose can be fabricated from the blend without the use of adhesive layers.

However, as stated on page 2 of the previous Action, Spohn teaches the use of a layer which is a blend of fluoropolymer and nylon (column 2, lines 18 – 49) which is a barrier layer (column 4, lines 5 – 18) for the purpose of making a fuel hose which is resistant to chemical attack (column 5, lines 35 – 44). Therefore, one of ordinary skill in the art would have recognized the advantage of providing for a blend of fluoropolymer and nylon which has the barrier properties of Spohn in Hunter, which is a fuel hose comprising layers which are blends of fluoropolymer and nylon, in order to obtain a hose which is resistant to chemical attack as taught by Spohn.

Applicant also argues on page 13 that the combination of Spohn would yield a barrier layer having one layer, because the barrier layer of Spohn comprises only one layer.

However, as stated above, it would be obvious to one of ordinary skill in the art to provide for both layers of Hunter, which comprise a blend of fluoropolymer and nylon, with the barrier properties taught by Spohn, in order to obtain a hose which is resistant to chemical attack as taught by Spohn.

Applicant also argues on page 13 that nothing in Hunter or Spohn suggests providing the blend of Spohn as an inside barrier layer on the inner surface of Hunter's tube.

However, as stated on page 2 of the previous Action, the innermost layer disclosed by Hunter and Spohn includes the inside surface of the multi – layer resin tube because it is bonded

Art Unit: 1772

directly to, and therefore includes, the layer which comprises the inside surface of the tube (column 2, lines 35 – 53).

Applicant also argues on page 13 that the combination of Hunter and Spohn produces a construct having an outer nylon layer, two nylon – fluoropolymer adhesive layers, a blend barrier layer and a conductive inner layer, and therefore would not produce the present invention. However, as stated above, the construct which would be produced would comprise two nylon – fluoropolymer adhesive layers which are also barrier layers, thereby producing the present invention.

Applicant also argues on page 14, that neither Hunter nor Spohn suggests a multilayer barrier layer wherein the concentration of the adhesive component decreases from the outermost layer to the innermost layer of the barrier layer, or wherein polyamide / nylon is excluded from the blend as required by the present claims.

However, as stated above, the claims prior to amendment did not include newly submitted Claims 13 and 15, which are directed to a barrier layer which is ‘present in a plurality of gradient layers at a concentration that increases in each sequential gradient layer.’ The amendment would therefore require further search and consideration to be completely addressed.

Applicant also argues, on page 15, that Hunter does not require a conductive layer other than the disclosed innermost layer, and therefore does not address Claims 7 – 8.

However, as stated on page 3 of the previous Action, Yokoe et al teach the use of a barrier layer comprising conductive carbon black in a fuel hose (column 5, lines 19 – 35) for the purpose of obtaining a hose which dissipates static charge (column 5, lines 19 – 35). Therefore, one of ordinary skill in the art would have recognized the advantage of providing for a barrier

Art Unit: 1772

layer comprising the conductive carbon black taught by Yokoe et al in Hunter, which is a fuel hose, depending on the desired charge dissipation of the end product as taught by Yokoe et al.

Applicant also argues on page 15 that the combination of Hunter and Yokoe et al is improper for the same reasons that the combination of Hunter and Spohn is improper, that Yokoe does not suggest a multilayer barrier layer wherein the concentration of the adhesive component decreases from the outermost layer to the innermost layer of the barrier layer.


However, as stated above, the claims prior to amendment did not include newly submitted Claims 13 and 15, which are directed to a barrier layer which is 'present in a plurality of gradient layers at a concentration that increases in each sequential gradient layer.' The amendment would therefore require further search and consideration to be completely addressed.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Patterson, whose telephone number is (571) 272 – 1497. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached at (571) 272 – 1498. FAX communications should be sent to (703) 872-9310. FAXs received after 4 P.M. will not be processed until the following business day.

Marc A. Patterson, PhD.

Marc Patterson
Art Unit 1772


HAROLD PYON
SUPERVISORY PATENT EXAMINER
HP

4/1/04